

Applicant : Randy Dean May
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Amendments to the Specification:

Please replace the abstract with the following amended paragraph:

A system and method ~~are disclosed~~ can detect ~~for the detection of~~ ethylene oxide in a sample of gas, such as air. The system includes a light source operating at a wavelength where molecules typically found within air absorb light at a substantially lower level than ethylene oxide molecules. Exemplary wavelengths are in the range of approximately 1.6-2.2 μm , and in particular at 1.6 μm , 1.645 μm , 1.692 μm , 2.195 μm , 2.2 μm , 2.216 μm , passes through the sample of gas to be detected by a detector. In one variation ~~embodiment~~, the light source is a tunable diode laser or a VCSEL and the ethylene oxide level is determined using harmonic spectroscopy.